

**REMARKS**

Pursuant to this paper, claims 66-94 are pending in the application. Claim 1-5, 10-22, 25-28, 30-34, 44-48 and 63-65 are canceled herein. Claims 6-9, 23, 24, 29, 35-43 and 49-61 were previously canceled. New claims 66-94, are added herein. Each of currently presented claims 66-96 is directed to the elected ligand analogs or compositions containing them.

The previously pending claims have been replaced with new claims 66-94 for the sake of clarity. Claim 66 is the sole independent claim.

Support for new independent claim 66 is found in prior pending claim 1. New claim 66 is also presented to more clearly and accurately set forth what Applicants regard as the invention.

Support for new dependent claim 67 is found in prior pending claim 62.

Support for new dependent claim 68 is found in prior pending claim 63.

Support for new claims 69 and 70 is found in prior pending claim 1.

Support for new dependent claims 71 and 72 is found in prior pending claim 2.

Support for new dependent claim 73 is found in prior pending claim 3.

Support for new dependent claim 74 is found, e.g., in prior pending claim 64.

Support for new dependent claim 75 is found in prior pending claim 10.

Support for new dependent claim 76 is found in prior pending claim 11.

Support for new dependent claim 77 is found in prior pending claim 12.

Support for new dependent claim 78 is found in prior pending claim 13.

Support for new dependent claim 79 is found in prior pending claim 14.

Support for new dependent claim 80 is found in prior pending claim 15.

Support for new dependent claim 81 is found in prior pending claim 16.

Support for new dependent claim 82 is found in prior pending claim 17.

Support for new dependent claim 83 is found in prior pending claim 18.

Support for new dependent claim 84 is found in prior pending claim 19.

Support for new dependent claim 85 is found in prior pending claim 20.

Support for new dependent claim 86 and 92 is found at pages 22-24 and Table 1 of the originally filed specification.

Support for new dependent claim 87 is found at page 22, ll. 11-12 of the originally filed specification.

Support for new dependent claim 88 is found, e.g., in prior pending claim 44.

Support for new dependent claim 89 is found at page 23, ll. 11-14 of the originally filed specification.

Support for new dependent claim 90 is found at page 22, l. 15 of the originally filed specification.

Support for new dependent claim 91 is found, e.g., in prior pending claims 1, 3, 10-12, and 21.

Support for new dependent claim 93 is found, e.g., in the covalent adduct example on page 80 and throughout the originally filed specification.

Support for new dependent claim 94 is found at page 28, ll. 20-22 of the originally filed specification.

The number of claims pursuant to this paper is within that already paid for by Applicants. However, if for any reason said payment is deemed insufficient, please charge Deposit Account No. 02-2275 for any balance deemed to be due.

No new matter has been added by any of the amendments made herein.

**I. Claim Rejections under 35 U.S.C. §112, First Paragraph:  
Written Description Requirement, new matter**

**A.** Claims 62 and 63 were rejected as allegedly not complying with the written description requirement of 35 U.S.C. §112, first paragraph, since, allegedly,  $L_1$  and  $L_m$  were insufficiently defined in the specification. (Office Action, pages 5-6.)

The present rejection of the claims is overcome for the following reasons.

The subject claims 62 and 63 have been canceled and the objected-to terminology no longer appears in the presently pending claims.

In view of the foregoing reasons, withdrawal of the present rejection of the claims under 35 U.S.C. §112, first paragraph, is respectfully requested.

**B.** Claims 1-5, 10-22, 62 and 63 were rejected as allegedly not complying with the written description requirement of 35 U.S.C. §112, first paragraph, for allegedly not sufficiently setting forth the metes and bounds of the claimed invention with respect to  $L_1$  and  $L_m$  being defined as “components defining a ligand determinant” and  $L_x$  is “a component unit of the ligand determinant. (Office Action, pages 6-8.)

The present rejection of the claims is overcome for the following reasons.

The subject claims have been canceled and the objected-to terminology no longer appears in the presently pending claims.

In view of the foregoing reasons, withdrawal of the present rejection of the claims under 35 U.S.C. §112, first paragraph, is respectfully requested.

**II. Claim Rejections under 35 U.S.C. §112, First Paragraph:  
Written Description Requirement, new matter**

Claims 1-5, 10-22, 62 and 63 were rejected under 35 U.S.C. §112, second paragraph, for allegedly being incomplete for omitting essential elements, namely the definitions of  $L_1$  and  $L_m$ , and since it is allegedly not clear what is meant by “ligand determinant.” (Office Action, pages 8.)

The present rejection of the claims is overcome for the following reasons.

The subject claims have been canceled and the objected-to “component” terminology no longer appears in the presently pending claims. Ligand determinant has been changed to ligand.

In view of the foregoing reasons, withdrawal of the present rejection of the claims under 35 U.S.C. §112, first paragraph, is respectfully requested.

**III. Claim Rejections under 35 U.S.C. §102(e)**

Claims 1-5, 13, 18, 19, 21, 22, 62 and 63 were rejected under 35 U.S.C. §102(e) as allegedly being anticipated by U.S. Patent No. 6,855,804 to Paul and Nishiyama. (Office Action, pages 8-9.)

The present rejection of the claims is overcome for the following reasons.

The Examiner acknowledged that the present rejection could be overcome by filing a “showing under 37 C.F.R. 1.132 that any invention disclosed but not claims in the reference was derived from the inventor of this application and is this not the invention ‘by another...’” (Office Action, page 8, l. 28 to page 9, l. 2.) Applicants wish to point out that the inventorship of record in the instant application as shown in the Declaration of Inventorship filed June 1, 2006 is *the same as* that in the cited reference, U.S. Patent No. 6,855,804 – *both* name and only name as joint inventors PAUL, Sudhir and NISHIYAMA, Yasuhiro. Accordingly, a *prima facie* case of anticipation under 35 U.S.C. §102(e) is not present.

In view of the foregoing reasons, withdrawal of the present rejection of the claims under 35 U.S.C. §102(e) is respectfully requested.

#### **IV. Claim Rejections for Obviousness Type Double Patenting**

A. Claims 1-15, 10-22, 62 and 63 were *provisionally* rejected for alleged obviousness type double patenting over claims 1-66 of copending U.S. application serial no. 10/581,294 (“the ‘294 application”). (Office Action, pages 9-10.)

Since the ‘294 application has not yet been allowed or issued, Applicants respectfully request that the present provisional rejection for alleged obviousness type double patenting be held in abeyance until such time that one or the other of the instant application or the ‘294 application is allowed at which time Applicants will earnestly consider which if any of said applications a terminal disclaimer should be filed in based on the claims as they will then stand in each.

B. Claims 1-5, 10-22, 62 and 63 were for alleged obviousness type double patenting over claims 1-22 of U.S. Patent No. 7,524,663 B2 (“the ‘663 patent”). (Office Action, page 10.)

The present rejection of the claims is overcome for the following reasons.

Sole independent claim 66 of the instant application recites that the electrophilic group is linked to a side chain of the recited ligand. However, the claims of the ‘663 patent neither teach nor suggest linkage of an electrophilic group to *a side chain* of the compound recited therein. Thus, a skilled worker would not be guided by the prior art claims to arrive at the presently claimed invention.

In view of the foregoing reasons, withdrawal of the present rejection of the claims for obviousness type double patenting is respectfully requested.

C. Claims 1-5, 10-22, 62 and 63 were for alleged obviousness type double patenting over claims 1-10 of U.S. Patent No. 6,885,804 B2 (“the ‘804 patent”). (Office Action, pages 10-11.)

The present rejection of the claims is overcome for the following reasons.

Sole independent claim 66 of the instant application recites that the recited electrophilic group is linked to a side chain of the recited ligand. However, the claims of the ‘804 patent neither teach nor suggest linkage of an electrophilic group to *a side chain* of the compound

recited therein. Thus, a skilled worker would not be guided by the prior art claims to arrive at the presently claimed invention.

In view of the foregoing reasons, withdrawal of the present rejection of the claims for obviousness type double patenting is respectfully requested.

### **CONCLUSION**

Applicants respectfully submit that pending claims 66-94 are in condition for allowance. Prompt and favorable reconsideration and allowance of all pending claims is respectfully requested. The Examiner is invited to contact the undersigned to discuss any matter in this application.

Pursuant to 37 C.F.R. §1.136(a)(3), please treat this and any concurrent or future reply in this application that requires a petition for an extension of time for its timely submission as incorporating a petition for extension of time for the appropriate length of time. It is believed that no fees other than those paid concurrently are due in connection with the filing of this paper. However, should it be deemed that any other fee is due in connection with this paper, authorization is hereby given to charge such fee to Deposit Account No. 02-2275.

Respectfully submitted,

**LUCAS & MERCANTI, LLP**

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